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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/666,443	09/19/2003	Andrew Ingle	12406-154001 / P2003,0943	8323
26181	7590	06/07/2006	EXAMINER	
FISH & RICHARDSON P.C. PO BOX 1022 MINNEAPOLIS, MN 55440-1022			ROSE, KIESHA L	
			ART UNIT	PAPER NUMBER
			2822	

DATE MAILED: 06/07/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

H:A

**Office Action Summary**

Application No.

10/666,443

Applicant(s)

INGLE, ANDREW

Examiner

Kiesha L. Rose

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 3/13/06.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-9, 21-24 and 26-42 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-9, 21-24 and 26-42 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

This Office Action is in response to the RCE filed 13 March 2006.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-3,5,6,9 and 39-41 are rejected under 35 U.S.C. 102(e) as being anticipated by McCormick et al. (U.S. Publication 2003/0143423).

In re claim 1, McCormick discloses an organic electronic device (Fig. 2a) that contains a substrate (12), an organic electronic device (18) on substrate, multiple epoxy seals (22/32) on substrate, where the multiple epoxy seals surrounding a perimeter of the organic electronic device, an encapsulation lid (24) on the multiple epoxy seals, wherein each of the multiple epoxy seals include desiccant, where the desiccant is barium oxide, calcium oxide, magnesium oxide, cobalt chloride, calcium chloride, calcium bromide, lithium chloride, zinc chloride, zinc bromide, sodium molecular, silicon dioxide, aluminum oxide, calcium sulfate, copper sulfate, potassium carbonate, magnesium carbonate, titanium dioxide, bentonite, acidic clay, montmorillonite,

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diatomaceous earth silica alumina, zeolite, silica, zirconia, activated carbon, or a mixture thereof. (Page 3, Paragraph 0034) In regards to the multiple epoxy seals, McCormick states that the epoxy can cover the organic device or form a perimeter seal around it, in addition it can comprise both the perimeter seal and the epoxy covering the organic device so there would be multiple epoxy seals with desiccant. (Page 1, Paragraph 0006)

In re claim 2, the multiple epoxy seals bond encapsulation lid to substrate and absorb at least one of oxygen or moisture. (Page 1, Paragraph 0004)

In re claim 3, the interior portion of encapsulation lid does not have a cavity. (Fig. 2a)

In re claims 5 and 6, the multiple epoxy seals further include an epoxy resin, a hardener and a filler. (Page 3, Paragraph 0031)

In re claim 9, the organic electronic device is an OLED device. (Page 1, Paragraph 0002)

In re claims 39-41, the multiple epoxy seals are UV-curable or thermal-curable. (Page 2, Paragraph 0029)

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 4,8,36 and 42 are rejected under 35 U.S.C. 103(a) as being unpatentable over McCormick.

In re claims 4,8,36 and 42, McCormick discloses all the limitations except for the process in which the multiple epoxy seals are formed. These limitations are process limitations, a "*product by process*" claim is directed to the product per se, no matter how actually made, *In re Hirao and Sato et al.*, 190 USPQ 15 at 17 (CCPA 1976) (footnote 3). See also *In re Brown and Saffer*, 173 USPQ 685 (CCPA 1972); *In re Luck and Gainer*, 177 USPQ 523 (CCPA 1973); *In re Fessmann*, 180 USPQ 324 (CCPA 1974); and *In re Marosi et al.*, 218 USPQ 289 (CAFC 1983) final product per se which must be determined in a "*product by, all of*" claim, and not the patentability of the process, and that an old or obvious product, whether claimed in "*product by process*" claims or not. Note that Applicant has the burden of proof in such cases, as the above caselaw makes clear. Even though product –by [-] process claims are limited by and defined by the process, determination of patentability is based upon the product itself. The patentability of a product does not depend on its method of production. If the product in product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product is made by a different process." *In re Thorpe*, 227 USPQ 964, 966 (Fed. Cir. 1985)(citations omitted)."

Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over McCormick.

In re claim 7, McCormick discloses all the limitations except for the desiccant to have a size of 10 microns or less. It would have been obvious to one having ordinary

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skill in the art at the time the invention was made to have the desiccant to have a size of 10 microns or less, since it has been held that where the general condition of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233. (1955)

Claims 21-24,26-29 and 35-38 are rejected under 35 U.S.C. 103(a) as being unpatentable over McCormick.

In re claims 21,35 and 38, McCormick discloses an organic electronic device (Figs. 1a/2a) that contains a substrate (12), an organic electronic device (18) on substrate, a desiccant ring (22) on substrate where the desiccant ring surrounds a perimeter of the organic electronic device, an epoxy (32) on substrate that surrounds a perimeter of the desiccant ring and an encapsulant lid (24) on epoxy, wherein the desiccant ring consists of a reactive metal or reactive oxide. (Page 3, Paragraph 0034) In regards to the multiple epoxy seals, McCormick states that the epoxy can cover the organic device or form a perimeter seal around it, in addition it can comprise both the perimeter seal and the epoxy covering the organic device so there would be multiple epoxy seals with desiccant. (Page 1, Paragraph 0006) McCormick discloses all the limitations except how the epoxy is applied, this is a process limitation. A "*product by process*" claim is directed to the product per se, no matter how actually made, *In re Hirao and Sato et al.*, 190 USPQ 15 at 17 (CCPA 1976) (footnote 3). See also *In re Brown and Saffer*, 173 USPQ 685 (CCPA 1972); *In re Luck and Gainer*, 177 USPQ 523 (CCPA 1973); *In re Fessmann*, 180 USPQ 324 (CCPA 1974); and *In re Marosi et al.*,

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218 USPQ 289 (CAFC 1983) final product per se which must be determined in a "*product by, all of*" claim, and not the patentability of the process, and that an old or obvious product, whether claimed in "*product by process*" claims or not. Note that Applicant has the burden of proof in such cases, as the above caselaw makes clear. Even though product –by [-] process claims are limited by and defined by the process, determination of patentability is based upon the product itself. The patentability of a product does not depend on its method of production. If the product in product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product is made by a different process." *In re Thorpe*, 227 USPQ 964, 966 (Fed. Cir. 1985)(citations omitted)."

In re claims 22 and 37, the desiccant ring is calcium. (Page 3, Paragraph 0034)

In re claims 23 and 26, the desiccant ring and the epoxy absorbs at least one or oxygen and moisture. (Page 1, Paragraph 0004)

In re claim 24, McCormick discloses all the limitations except for the height of the desiccant ring being between 300nm to 1 micron. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have the height of the desiccant ring being between 300nm to 1 micron, since it has been held that where the general condition of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233. (1955)

In re claim 27, the epoxy seals include desiccant, where the desiccant is barium oxide, calcium oxide, magnesium oxide, cobalt chloride, calcium chloride, calcium

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bromide, lithium chloride, zinc chloride, zinc bromide, sodium molecular, silicon dioxide, aluminum oxide, calcium sulfate, copper sulfate, potassium carbonate, magnesium carbonate, titanium dioxide, bentonite, acidic clay, montmorillonite, diatomaceous earth silica alumina, zeolite, silica, zirconia, activated carbon, or a mixture thereof. (Page 3, Paragraph 0034)

In re claim 28, the interior portion of the encapsulation lid does not have a cavity. (Fig. 2a)

In re claim 29, the organic electronic device is an OLED device. (Page 1, Paragraph 0002)

### ***Response to Arguments***

Applicant's arguments with respect to claims 1-9,21-24 and 26-42 have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

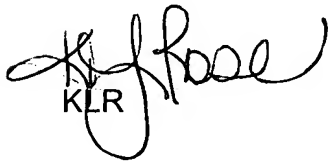
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kiesha L. Rose whose telephone number is 571-272-1844. The examiner can normally be reached on T-F 8:30-6:00 off Mondays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Zandra Smith can be reached on 571-272-2429. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.



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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



KLR